

GNAPHALIUM EXILIFOLIUM (ASTERACEAE:  
GNAPHALIEAE) IN  
COLORADO AND SOUTH DAKOTA

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Stricter definition of the genus *Gnaphalium* L. (e.g., Anderberg 1991) leaves the genus in North America north of Mexico with three species: *G. exilifolium* A. Nels., *G. palustre* Nutt., and *G. uliginosum* L. The lectotype species of *Gnaphalium* sensu stricto is *G. uliginosum*—discussion of this choice rather than *Pseudognaphalium* (*Gnaphalium*) *luteo-album* (L.) Hilliard and Burt is given in Jeffrey (1979), Hilliard and Burt (1981), and McNeill et al. (1987). The remainder of the species of *Gnaphalium* sensu lato in the United States and Canada are divided among the segregate genera *Pseudognaphalium* Kirpichn., *Euchiton* Cass., *Gamochaeta* Wedd., and *Omalotheca* Cass.

*Gnaphalium exilifolium* has been treated as conspecific with *G. uliginosum* in various floristic accounts of the western United States (e.g., Great Plains Flora Association 1986; Weber & Whittman 1994) but regarded as a separate species in others (e.g., Harrington 1954; Welsh et al. 1993; Cronquist 1994). Examination of collections of these plants at ARIZ, ASU, BRIT, GH, NCU, NMC, TEX, and US have provided perspective on the distinction of *G. exilifolium*. The three species of *Gnaphalium* sensu stricto that occur in the United States can be identified by the contrasts in the key below.

1. Leaves spatulate to oblanceolate-oblong, 3–8(–10) mm wide; bracts of capitulescence oblanceolate to obovate, longest 4–12 mm × 1.5–4 mm, shorter than or equalling to slightly surpassing the glomerules; inner phyllaries narrowly oblong with blunt apex. \_\_\_\_\_ **Gnaphalium palustre**
1. Leaves linear to narrowly oblanceolate, 0.5–3 mm wide; bracts of capitulescence linear to oblanceolate or obovate, longest 5–25 mm × 0.5–2 mm, distinctly longer than the glomerules; inner phyllaries triangular with acute apex.
  2. Leaves oblanceolate, less commonly linear, the largest 1–5 cm; capitulescence terminal and capitate, rarely with axillary glomerules below; bracts subtending capitulescence linear to oblanceolate or obovate, 1–2 mm wide, the longest mostly 5–15 mm. \_\_\_\_\_ **Gnaphalium uliginosum**
  2. Leaves linear, the largest 0.4–5 cm; capitulescence commonly spike-like, with numerous sessile axillary glomerules; bracts subtending capitulescence linear, 0.5–1 mm wide, the longest mostly 10–25 mm. \_\_\_\_\_ **Gnaphalium exilifolium**

The account of the United States, Canada, and Greenland flora by Kartesz (1999) records *Gnaphalium exilifolium* in New Mexico, Arizona, Utah, and Wyoming,

and the species also occurs in northern Chihuahua, Mexico (Nesom unpublished). Records also exist for its occurrence in Colorado and South Dakota—as clarified below. Although recent accounts of the flora of Colorado (Weber & Whittman 1994, 1996a, 1996b) and South Dakota (Dorn 1977; Van Bruggen 1985) have not included *G. exilifolium* as an accepted species, collections of it (as defined above) have been made from both states.

**COLORADO. Montrose Co.:** Cimarron, 2200 m, 8–10 Sep 1917, *Eggleston 14200* (GH).

Recognition of the presence *G. exilifolium* in Colorado results from a more focused species concept rather than from its rarity. *Gnaphalium uliginosum*, with which it has been confused, also occurs in Colorado. The distinction between the two taxa was correctly made by Harrington (1954, p. 624), although he supplied the caveat that “all our plants [of *G. exilifolium*] may actually be a part of *G. uliginosum* L.” Collections at GH of *G. exilifolium* from Colorado also are from the following counties: Clear Creek, Delta, Lake, Larimer, Mineral, Park, and Summit.

**SOUTH DAKOTA. [Lawrence Co.:** Black Hills National Forest, Yellow Creek, near Kirk, banks of Ice Pond, 27 Aug 1910, *Murdoch 4337* (GH).

McIntosh (1931) identified *G. exilifolium* as occurring in the Black Hills of South Dakota, although other botanists have apparently identified the same plants as *G. uliginosum*. The latter was specifically noted to occur in Custer and Lawrence counties, South Dakota (Great Plains Flora Association 1976). The cited Murdoch collection unequivocally confirms the occurrence of *G. exilifolium* in South Dakota; the possibility of the existence of *G. uliginosum* there has not been eliminated. Neither species is documented for South Dakota in the Forest Service repository at RM.

The nomenclature details for *Gnaphalium exilifolium* are as follows.

***Gnaphalium exilifolium*** A. Nels. [nom. nov. for *G. angustifolium*], Bull. Torrey Bot. Club 29:406. 1902. *Gnaphalium angustifolium* A. Nels., Bull. Torrey Bot. Club 26:357. 1899 (non Lam. 1788).

*Gnaphalium grayii* A. Nels. & Macbr. [nom. nov. for *G. strictum*], Bot. Gaz. 61:46. 1916.

*Gnaphalium strictum* A. Gray, Pacif. R.R. Rep. 4:110. 1858 (non Moench 1794; non Roxb. 1814).

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